Thirty shades of offensiveness: L1 and LX English users' understanding, perception and self-reported use of negative emotion-laden words[1]

Jean-Marc Dewaele[1]
Birkbeck College, University of London, United Kingdom

Abstract
Previous research on multilinguals' emotion-laden words has shown that these have more emotional weight in the first language(s) than in languages acquired later in life (Dewaele, 2013). The present study investigates this further with a list of 30 emotion-laden words extracted from the British National Corpus that range in emotional valence from mildly negative to extremely negative. An analysis of data collected via an online questionnaire from 1159 native English (L1) users and 1165 English foreign language (LX) users revealed, surprisingly, that LX users overestimated the offensiveness of most words, with the exception of the most offensive one in the list. It is suggested that when coming across these words in a classroom, learners are warned about them and they attach a red flag to them reminding them of their power. As a result they generally overestimate the power they fail to perceive accurately themselves. LX users were significantly less sure about the exact meaning of most words compared to the L1 users and reported more frequent use of relatively less offensive words while the L1 users reported higher use of more taboo words. Variation among LX users was linked to having (or not) lived in English-speaking environments, to context of acquisition and to self-perceived level of proficiency in English LX.

Keywords: multilingualism, emotion, swearwords, offensiveness, English L1, English as a foreign language

1. Introduction

Timothy Jay, a cognitive psychologist who has devoted his career to the study of cursing and swearwords, wondered fifteen years ago why "curse words have been only of brief and passing interest to psychologists and linguists" (2000:18). Because of this, "the absence of research on emotional speech has produced theories of language that are polite but inaccurate" (p. 18). He wonders, rhetorically, whether the topic is too taboo for academicians. He has consistently combatted the marginalization of emotional speech in theories of language, pointing to the richness and complexity of swearing: "The articulation of a curse word thus has incorporated into it social rules about gender identity, race, power, formality, prohibition, etc." (p. 18). Using these words in a foreign language, or in another variety of the first language, adds another layer of complex interactions between multiple sociobiographical, psychological and linguistic variables (Caldwell-Harris, 2015; Dewaele, 2013, 2015, 2016; Harris, 2004; Howard, Mougeon & Dewaele, 2013). A question that is probably as humanity itself is why people swear and use taboo words. Jay (2009) points out that: "Swearing is like using the horn on your car, which can be used to signify a number of emotions (e.g., anger, frustration, joy, surprise)" (Jay, 2009).

The metaphor of the car horn is nice, but it is far from perfect. A tourist wherever in the world will recognize a car horn when crossing the street. However, the same tourist is unlikely to recognize the swearwords in the speech of the irate driver. In other words, the metaphor works best within a community of people sharing a language. Even within that community there will be differences, with first language users (L1 users) having a clear advantage over foreign language users (LX users) in terms of pragmatic competence, defined by Fraser (2010:15) as "the ability to communicate your intended message with all its nuances in any socio-cultural context and to interpret the message of your interlocutor as it was intended." LX **learners** who become LX **users** will have gaps in their pragmatic competence; they "may produce grammatically flawless speech that nonetheless fails to achieve its communicative aims" (Fraser, 2010:15). Telling and understanding jokes in the LX, or being appropriately polite are also more challenging for LX than for L1 users. However the social consequences for not getting the joke, or not being as polite as expected are less severe than the inappropriate use of offensive words. Their use are part of "a complex social practice fulfilling intricate pragmatic functions" (Beers Fägersten, 2012:20) and getting it wrong could cause serious embarrassment to the LX users and their interlocutors (Dewaele, 2012).

[1] Preprint version of the paper published in *Journal of Pragmatics* (2016) http://dx.doi.org/10.1016/j.pragma.2016.01.009

Swearing may carry social stigma, but it plays a crucial part in social interactions in speech communities. It can have positive social consequences for the speaker: "it influences the perceived credibility, intensity, and persuasiveness of the swearer" (Vingerhoets, Bylsma and De Vlam, 2013: 287). It fulfils a number of interpersonal functions: "Expressing emotion; humour and verbal emphasis; social bonding and solidarity; and constructing and displaying identity" (Stapleton, 2010:289). It can also, inhibit aggression and cause emotional pain to others (Vingerhoets et al., 2013:287). The question is whether these functions can be equally fulfilled in the L1 or in the LX of multilinguals. The incomplete or inaccurate conceptual representation of offensive words and the different set of standards that apply to LX users compared to those applying to the L1 users, who are perceived as members of the "in-group", means that LX users swearing in an LX might have a very different illocutionary effect compared to the same words used by L1 speakers in an identical situation (Dewaele, 2010, 2013).

Because swearwords and obscene expressions attract people's attention, they have been exploited by advertisers who come up with clever slogans that mimic taboo expressions. One example is "go fun yourself" in a recent publicity campaign for the Toyota Aygo (http://www.toyota.co.uk/new-cars/aygo/index.json). Did the creators of this publicity campaign check how L1 and LX users of English reacted to this slogan that is ungrammatical in standard English? Did they realize that word play is greatly appreciated by L1 users but may be harder to grasp by LX users? These questions arise from earlier research on multilingual swearing that showed systematic differences in the perception of the emotional force of swearwords in the L1 and the LX, and in differences in self-reported use of these words in the L1 and LX (Dewaele, 2004a, b, 2010, 2013).

Emotion research has developed since Jay's (2000) lament about its absence. However, many unanswered questions remain on the use of emotion-laden words by LX users, defined by Pavlenko (2008) as words that "do not refer to emotions directly but instead express ("jerk", "loser") or elicit emotions from the interlocutors (…)" (p. 148). This area of research is important, not just for our understanding of the development of the mental lexicon of multilinguals, but also for the LX learners and teachers who face the scary prospect of having to grasp or to teach the meaning and the use of taboo words. Those working in service industries, media or in marketing also need to understand how to deal, or how to exploit the dark side of language and communication (Caldwell-Harris, 2015).

The present study will focus be on differences between LX users and English L1 speakers in semantic representation -operationalized as the self-perceived understanding of meaning- and conceptual representation (operationalized as the self-perceived offensiveness and self-reported frequency of use of 30 English words with a mild to an extreme negative emotional valence).

This paper starts with a short overview of the literature that underlies the present investigation, considering firstly some of the literature on sociolinguistic variation in swearing from a monolingual perspective, and secondly, the research on individual variation among multilinguals dealing with emotion words. After that, the six research questions will be presented, followed by a section on the methodology. The results section will present the statistical analyses. The findings will then be discussed and some tentative conclusions will be presented.

2. Literature review

2.1 Swearing in L1 contexts

Swearing has been defined as language use that: (i) refers to something taboo or stigmatized in the swearer's culture, (ii) is not intended to be interpreted literally, (iii) can be used to express strong emotions or attitudes (Andersson and Trudgill, 2007).

One of the classic sociolinguistic swearing studies is Bailey and Timm (1976). The researchers used questionnaires where descriptions were given of hypothetical situations associated with different emotions and asked participants when they would swear. The emotions had little effect on the swearing, but everything depended on the social identity of the interlocutor, their age and sex (p. 444). The presence of children and parents led to more constraint in swearing. Female participants accounted for 70% of the total usage of weak expletives ("darn", "oups"), while male participants accounted for 64% of the strong

expletives ("damn", "fuck", "shit"). Beers Fägersten (2012) wonders whether this pattern might be linked to gender differences in the offensiveness threshold, with women rating obscene words as more offensive than men (p. 12). She suggests that a higher sensitivity to the offensiveness of swearwords may lead to a swearing inhibition.

Beers Fägersten (2007) collected data from 60 undergraduate students at the University of Florida (33 males and 27 females). Three types of tasks were used, feedback on a list of single swear words, feedback on swear words embedded in utterances, and, after completion of the questionnaires, 23 participants agreed to be interviewed about the different contexts in which they used language. The first task was a traditional list of 12 swearwords ("ass", "asshole", "bastard", "bitch", "cunt", "damn", "dick", "fuck", "hell", "motherfucker", "nigger", "shit" (p. 19). The word "nigger" obtained the highest mean offensiveness rating, followed by "cunt", "motherfucker", "bitch" and "fuck". When asked about the ratings, participants explained that a lot depended on the situation in which they were used and on the frequency of use in the environment. One participant pointed out that the offensiveness depended on the person on the receiving end: "African-American male: How offensive these words are is based on the receiver's interpretation". (p. 20).

The second part of the questionnaire contained utterances with the words "ass", "shit" and "fuck". The researcher included utterances with varied contextual details such as the setting and race, gender, and social status. The analysis of the overall average ratings of the swear words in dialogues showed that, with the exception of "shit" and "fucking", the swear words were perceived to be less offensive.

Rayson, Leech and Hodge (1997) used the conversational corpus in the British National Corpus (BNC) to consider social differentiation in the use of British English vocabulary. The words "fucking" and "fuck" were among the 26 most characteristic words for male speech. The same words, and "shit", were also used more frequently by under-35's (p. 7). Skilled working class and working class speakers stood out for their higher use of "fucking" and "bloody" (p. 10).

The BNC has also been used by McEnery and Xiao (2004) who looked at the use of "fuck" in modern British English. The word was found to be linked to a range of independent variables, appearing much more frequently in dialogues than in monologues. Male speakers, teenagers, young adults, people who left school at age 15-16 and speakers from lower social classes used "fuck" most frequently.

2.2 Emotion and swearing in multilingual contexts

Two key studies by Aneta Pavlenko triggered new interest in bilingual memory and bilingualism and emotion (1999, 2002). Pavlenko (1999) argued that semantic representations need to be distinguished from conceptual representations in order to avoid confusion. She pointed to foreign language learners who know the meanings of particular words but are unable to use them for "description and categorization of real life events" (p. 225). Pavlenko (2002) focused on emotion concepts in Russian-English bilinguals, more specifically the "internalization of new emotion categories, discourses, and scripts in adulthood" (p. 50). She later defined emotion concepts as "prototypical scripts that are formed as a result of repeated experiences and involve causal antecedents, appraisals, physiological reactions, consequences, and means of regulation and display" (Pavlenko, 2008:149-150). Emotion words have been distinguished from emotion-laden words that do not explicity refer to an emotion but express or elicit emotions from the interlocutors (p. 148). Jeanette Altarriba and colleagues have demonstrated the distinctiveness of emotion and emotion-laden words, both from concrete and abstract words, in terms of representation, processing, and recall (Altarriba and Bauer, 2004; Kazanas and Altarriba, 2015).

Emotion-laden words occur frequently in daily interactions, it can thus be assumed that at some point LX users will start noticing and understanding these words (developing a semantic representation). More exposure will lead to a development of a complete semantic representation, i.e. LX users will start to understand the literal meaning and the emotional load of the word. A conceptual representation will emerge, which will form a crucial part of LX users' sociopragmatic competence. It will allow them to know how often and in what situation a particular word or expression can be used, what hedges might precede or follow it to attenuate its illocutionary effects, what kind of non-verbal cues may accompany it, what kind of intonation or prosody may strengthen or weaken its effect, what the likely reaction will be of interlocutors, what inference they will draw from the usage of the word in a script, and what the social consequences will be for the speaker (Dewaele, 2012). This is extensive knowledge that is typically hard to pick up in a school context.

A milestone in swearing research is Jay and Janschewitz's (2008) pragmatic study on perceived offensiveness and likelihood of hypothetical scenarios involving the use of taboo words among 68 native English and 53 non-native English students at the University of California in Los Angeles.
The between-subjects variables included gender and English experience. The within-subjects variables included social-physical context (Dean's office, dorm room, parking lot), speaker status (dean, student, janitor), and the degree of tabooness of the word (low: "crap", hell", "idiot"; medium: "bastard", "goddamn", "piss"; high: "cocksucker", "cunt" and "fuck") (p. 277). Participants were presented once with a questionnaire measuring the offensiveness of the scenario and once with a questionnaire inquiring about the likelihood of the scenario, both included 7-point Likert scales. The researchers used a mixed 3 X 3 X 3 X 2 X 2 design, manipulating the three within-subjects contextual variables and the two between-subjects variables (p. 276), which amounted to a total of 81 scenarios per questionnaire (p. 277).
The researchers found significant main effects on offensiveness ratings for speaker (Deans are less expected to swear than students), location (students swearing in their dorm is less offensive than in the Dean's office) and tabooness (words in the "high" category are more offensive across contexts). Significant interactions were also found for speaker-location, location-tabooness and tabooness-speaker. Similar patterns emerged for likelihood ratings. A significant negative correlation was found between offensiveness ratings and likelihood ratings. Against expectation, no main effect was found for English experience on offensiveness ratings, nor on likelihood ratings although "the range between the highest and lowest average condition rating was larger for native than non-native speakers" (p. 280). The authors attribute this to variability in English experience in the LX sample. However, these had spent an average of 11 years in the US, were highly proficient and socialised in English. LX participants who had become fluent in English later in life had higher average offensive ratings (p. 280). Also, the negative relationship between likelihood and offensiveness ratings was not significant for the LX group.
Jay (2009) expanded on the crucial importance of the situation in which swearwords are used, and the degree of formality of the speech. A particular swearword may thus not be judged offensive in a casual conversation between friends but would be considered offensive by the same people at a formal dinner.

Catherine Caldwell-Harris and her colleagues took a different approach. They looked into physiological responses to swearwords and taboo words in the L1 and L2 of bilinguals. Harris, Ayçiçeği and Gleason (2003) measured the reactions of 32 balanced Turkish-English bilingual students at Boston University to taboo words and reprimands in their L1 Turkish and the translation equivalents in the L2 English. The researchers found significantly stronger skin conductance responses to the stimuli in Turkish L1 than in English L2. Harris (2004) used a similar approach focused with the adult offspring of Latin American immigrants in the US, for whom English was considered an L2 but was the dominant language, and more recently arrived immigrants from Latin America to the US. The latter group showed stronger skin conductance responses to reprimands in Spanish L1. Early learners of English, who had been socialized in American high schools, responded similarly in Spanish and English. Caldwell-Harris, Tong, Lung and Poo (2011) studied the reactions of 64 bilingual native Mandarin speakers to taboo items in English and Mandarin. Participants judged L1 Mandarin expressions to be stronger than L2 English expressions, but many reported a preference for L2 English to express anger and taboo phrases, possibly "because of the greater social constraints in Chinese culture to minimize emotional expression" (p. 348). Ratings for the 3 taboo items in English ("He's an asshole", "He screwed your mother", "She's a bitch") received slightly higher ratings than the corresponding Mandarin items (p. 342), but skin conductance responses for insults, reprimands and taboo words were comparable in both languages.
Skin conductance responses have been combined with reaction times in Eilola and Havelka (2011). The authors investigated a group of 32 native English speakers and a group of 31 bilinguals (Greek-English) who were students at the University of Kent (UK) using emotional and taboo Stroop tasks. Significantly slower response times were found for the 20 negative and the 20 taboo words when compared to neutral words in both groups of participants. Skin conductance responses were different in both groups: native English speakers displayed significantly stronger reactions to negative and taboo words when compared with neutral and positive words but no such difference was found for the bilinguals, a surprising result that the authors link to the fact that the bilinguals were unbalanced but proficient speakers of English. Caldwell-Harris (2015:214) points out that that "most common category of explanations is that emotional resonances in the discourse context accrue to utterances because human memory is inherently associative".

Intra-speaker (the same individual's different usage in different contexts) and inter-speaker variation (differences between speakers) have been the focus of a number of studies that were based on the Bilingualism and Emotion Questionnaire (BEQ) database (Dewaele and Pavlenko, 2001-2003).
More than one thousand adult multilinguals from all over the world were found to typically prefer swearing in their L1 (Dewaele, 2004a). LXs learnt at school were less likely to be used for swearing. Frequent use of a LX was linked to more frequent use of that LX for swearing. Frequent use of the LX suggests a higher level of LX socialisation which may convince LX users that they are close enough to the in-group to start swearing like them (Dewaele, 2004a). Gender and education level were unrelated to LX choice for swearing. Finally, participants preferred swearing in emotionally powerful LXs (Dewaele, 2004b).
Dewaele (2011) focused on self-reported frequency of use of French for swearing among 628 LX users of French extracted from the BEQ. Only after a long time in a Francophone environment did French LX users start using French swearwords. Level of proficiency was positively linked to swearing frequency in French LX. A high level of socialization in French was also linked to more swearing in French. Context of acquisition of French did emerge as a significant variable, with those who had used their French in authentic communication outside the classroom being more likely to swear in French after an average of fifteen years of regular contact with French.
Dewaele (2010) looked at frequency of L1 and L2 use for swearing among 386 adult multilinguals who had declared to be maximally proficient in both languages and used both constantly. It emerged that despite the similarity in proficiency and frequency of use of both languages, the L1 was preferred for swearing. L2 swearwords were considered to be emotionally weaker than L1 swearwords.
Context of acquisition (CoA) and age of onset of learning (AoA) the LX were found to have significant effects on the frequency of use of the LX to swear among 486 pentalinguals (Dewaele, 2013). A low AoA in an LX was linked to more frequent swearing in that language. Also, mixed or naturalistic learning of an LX was linked to higher use of the LX for swearing compared to formal instruction only. Frequent use, strong socialisation and a wide network of LX interlocutors was linked to more swearing in the LX. Some participants reported that switching to another language for swearing allowed them to circumvent the social taboo in their L1 cultures.
More recent work based on part of the corpus on which the present study is based, has looked at variation in self-reported swearing frequency in English by 1159 English L1 users and 1165 English LX language users (Dewaele, 2016). A significant effect emerged for the type of interlocutor on swearing frequency: swearing was significantly more common with friends, followed by swearing alone, and was less frequent in interactions with family members, colleagues and strangers. Significant differences emerged between English L1 and LX users with the latter swearing significantly less in English. The analysis of the data of all 2347 participants showed that participants with high scores on the personality traits Psychoticism, Extraversion and Neuroticism reported significantly more swearing in English. LX users of English who felt very proficient, who were frequent users, who had a low AoA and had used English outside school when learning the language reported more frequent swearing in English across interlocutors.

Using the L1 part of the corpus on which the present study is based, Dewaele (2015) focused on the differences between 414 British English L1 speakers and 556 American English L1 speakers in self-reported frequency of swearing and in the understanding of the meaning, the perceived offensiveness and the frequency of use of 30 negative words extracted from the British National Corpus. No significant differences were found between the British and American English groups in overall self reported frequency of swearing. The British English L1 participants did report a significantly better understanding of nearly half the words. They rated four words (including "bollocks") as significantly more offensive than the American English L1 participants. The American English L1 participants rated a third of the words as significantly more offensive (including "jerk"). British English L1 participants reported using a third of the words more frequently (including "bollocks") while the American English L1 participants reported more frequent use of half of the words (including "jerk"). The results were interpreted as evidence of subtle differences in semantic and conceptual representations of these words in the minds of British and American L1 users of English.

The literature review suggests that research on negative emotion-words and swearing in particular, can no longer be described as "absent", as Jay (2000) concluded. Recent pragmatic work has focused on emotion and impoliteness (Culpeper 2011; Langlotz and Locher, 2012; Langlotz and Locher, 2013; Langlotz and Soltysik Monnet (2014) but still lags behind areas in pragmatic research such as speech acts. While

sociolinguists have investigated swearing and swearwords, they have typically done so from a monolingual perspective. We propose to take a multilingual perspective, and for reasons of space we will not include the classic sociolinguistic variables such as gender, age, social class or ethnicity in our design but we will rather focus on the differences between judgments of L1 and LX speakers of English, and on the effect of linguistic profile on variation among LX users of English. The major difference with previous work on the BEQ is that we will use a list of 30 specific English words with more or less negative emotional valence, following Caldwell-Harris' example, to elicit feedback on the understanding of meaning, perceived offensiveness and self-reported frequency of use of these 30 emotion-laden words. The independent variables will be L1 versus LX, having (or not) lived in an English-speaking country, context of acquisition and self-reported level of oral proficiency in LX English.

3. Methodology

3.1. Instruments

The data were collected through snowball sampling. The anonymous online questionnaire was an open-access survey, advertised through several listservs, targeted emails to teachers and students, and informal contacts asking them to forward the link to friends. It remained online for five months in 2011-2012 and attracted responses from mono- and multilinguals across the world. Of the 2500 participants who filled out the questionnaire, 2324 did so completely.

On-line questionnaires allow the collection of large amounts of data from diverse samples in terms of sex, age, race, socio-economic status and geographical location (Wilson and Dewaele, 2010). The authors have argued out that in multilingualism research participants do not necessarily need to represent the general population but that they must meet specific criteria, such as sufficient metalinguistic awareness, and must be able and willing to engage with the questions on language preferences and use. Multilinguals are strongly aware of the amount of swearing they use in specific interactions, and given the anonymity they have no reason to lie about the frequency with which they swear. Indeed, falsifying the answers would in no way benefit them. This reduced social desirability (the tendency of participants to answer questions in a manner that they imagine will be viewed favourably by the researcher) is another crucial advantage of internet-based questionnaires. Also, with a very large sample of multilinguals from all over the world, the results have stronger ecological validity, as the effects of local social, political and historical factors linked to particular languages or linguistic practices are averaged out.

Thirty emotion-laden words were extracted from the British National Corpus (BNC), "a 100 million word collection of samples of written and spoken language from a wide range of sources, designed to represent a wide cross-section of British English from the later part of the 20th century, both spoken and written" (http://www.natcorp.ox.ac.uk/). The BNC is mostly based on various types of written texts. Ten per cent of the BNC are transcriptions of oral speech, including unscripted conversations between British English participants from different age groups, regions and social classes in different contexts, ranging from formal meetings to radio shows and phone-ins. The selection criteria for the words was that they needed to frequent enough to be recognised by native speakers and needed to be emotion-laden words (cf. Pavlenko, 2008). There are a number of sub-categories of emotion-laden words, including "(a) taboo and swearwords or expletives ("piss", "shit"), (b) insults ("idiot", "creep") (...)" (Pavlenko, 2008, p. 148). The boundaries of the subcategories are not always clear because some words can fit in various categories: "For instance, taboo and swearwords that commonly function as insults may in some contexts appear as friendly terms of affection. On the other hand, words that are not commonly viewed as emotion-laden may acquire emotional connotations in discourse" (p. 148).

Moreover, the 30 words (and two multiword sequences) had to have at least a mild negative emotional valence (for example "daft"), ranging to words with a very strong negative valence, and who are even considered taboo swearwords (for example "cunt"). Racial words and words referring to sexual orientation were excluded. The inclusion of words ranging across a continuum was intentional in order to keep participants on their toes when filling out the questionnaire. Most words were embedded in a short utterance created by the researcher, in order to include minimal script as it affects the evaluative meaning of unambiguous emotion words (Greasley, Sherrard and Waterman 2000). Two words ("shit!", "damn!" and one two-word expression ("fucking hell!") were simply presented as exclamations. Most words were nouns and adjectives, sometimes used as insults. All 30 utterances ended with exclamation marks, to suggest that they were uttered forcefully and/or with a loud voice (see table 1).

Data were collected through the following question: "For each word/expression, provide a score on a 5-point scale (1 = very low, 5 = very high) for the following: 1) how well you understand the meaning? 2) how offensive it is?[2] 3) how frequently do you use it?"

Table 1 The list of 30 words extracted from the BNC

Expression	Frequency in British National Corpus
That is **daft**!	635
Bollocks!	290
Bugger!	573
Damn, look what he's done!	1896
Fucking hell!	154
Has he **lost his mind**?	14
He's a bit of a **fool**.	1848
He's a little **maniac**!	134
He's **stupid**!	3093
He's a **wacko**!	17
She's so **silly**!	2646
He's so **weird**!	1060
He's such a **comedian**!	330
He's such a **wanker**!	96
He's **thick**!	4516
She's **bonkers**!	48
She's such a **bitch**!	879
She's such a **lunatic**!	245
She's such a **slut**!	92
Shit!	1796
He's such an **arsehole**!	71
What a **cunt**!	213
What a **fruitcake**!	19
What a **jerk**!	234
What a **moron**!	52
What a **nutter**!	76
What an **idiot**!	603
What a **bastard**!	1276
He's a **prick**!	230
She's such a **loser**!	338

One-sample Kolmogorov-Smirnov tests showed that the values for meaning, offensiveness and frequency of use of the emotion-laden words and expressions (hence we will refer only to "words") are not normally distributed. As a consequence, non-parametric statistical techniques were used: Mann-Whitney tests instead of t-tests, Kruskal Wallis one-way analyses of variance by ranks instead of ANOVAs and Spearman Rank correlation analyses instead of Pearson product-moment correlation analyses.

The research design and questionnaires received ethical clearance from the School of Social Sciences, History and Policitics at Birkbeck, Univeristy of London. Participants started by ticking the consent box before filling out a short sociobiographical questionnaire with questions about gender, age, education, language history and present language use.

3.2. Participants

A total of 2347 participants (1636 females, 664 males) filled out the questionnaire. The mean age was 32 years (*SD* = 12). Participants were generally highly educated with 219 having a high school diploma, 772 a Bachelor's degree, 758 a Master's degree and 570 a PhD. The majority of highly educated, female participants is typical in web-based language questionnaires (Wilson and Dewaele, 2010).

The largest group were Americans (n = 555), followed by British (n = 426), Polish (n = 125), Germans (n = 107), French (n = 105), Italians (n = 90), Israeli (n= 86), Swiss (n = 86), Dutch (n = 75), Canadians (n = 62), Belgians (n = 43), Spaniards (n = 43), Austrians (n = 42), Swedes (n = 39), Australians (n = 30), and smaller groups representing another 75 nationalities, including many with double nationalities.
The sample of participants consisted of 190 monolinguals, 503 bilinguals, 645 trilinguals, 517 quadrilinguals, 279 pentalinguals, 125 sextalinguals, 37 septalinguals, 16 octalinguals, 9 nonalinguals, one participant reported 10 and another 12 languages.
English was the most frequent L1 (n = 1159). Slightly over half of the participants had English as a foreign language (n = 1165). Their L1s were German (n = 171), French (n= 135), Polish (n = 124), Spanish (n = 104), Dutch (n = 90), Italian (n = 87), Swiss German (n = 43), Swedish (n = 39), in decreasing order there were smaller groups of native speakers of Portuguese, Hebrew, Russian, Chinese, Finnish, Greek, Croatian, Serbian, Turkish, Hungarian, Japanese, Catalan, Danish, Norwegian and another 48 languages with fewer than 10 participants. Many participants also listed two L1s.
The English L1 users rated their oral proficiency in English very high: *Mean* = 4.9 (*SD* = .70) on a 5-point Likert scale. They also reported extremely frequent use of English (*Mean* = 4.8, *SD* = .74) on a 5-point Likert scale. The English LX users rated their oral proficiency in English significantly lower but still high: *Mean* = 4.4 (*SD* = .73) on a 5-point Likert scale (Mann-Whitney Z = -23.6, $p < .0001$). They also reported significantly lower – but still frequent - use of English (*Mean* = 4.2, *SD* = 1.0) on a 5-point Likert scale (Mann-Whitney Z = -22.6, $p < .0001$).
Mean age of acquisition of English for the LX users was 9.7 years (*SD* = 3.8). Most participants had learned English in mixed contexts, namely a combination of classroom instruction and authentic use outside (n = 552), others had learned it through classroom instruction only (n = 503), while the remaining 102 participants had learned English naturalistically, i.e. without any formal instruction.
A majority of LX users had lived – or was currently living – in an English-speaking country for more than 3 months (n = 673), with the remaining 489 not having left their home country.

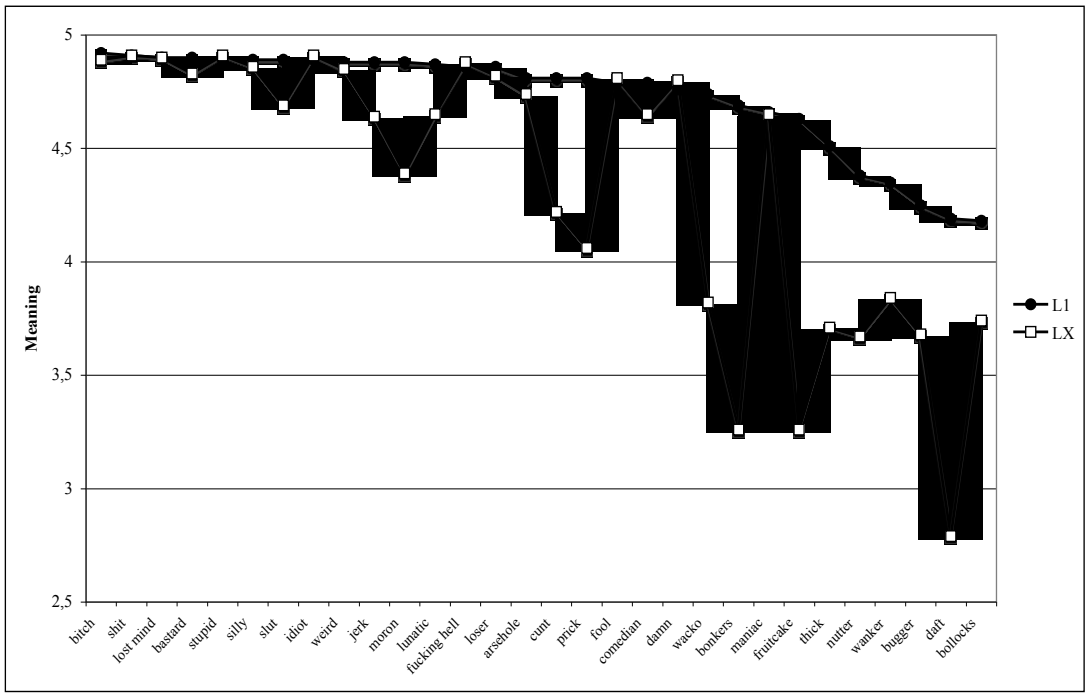
4. Research questions

1. Do LX users of English report being as comfortable in their understanding of the meaning of the 30 words as L1 users of English??
2. Do LX users of English have the same perception of offensiveness of the 30 words as L1 users of English?
3. Do LX users of English report comparable frequencies of use of the 30 words as L1 users of English?
4. What is the effect of having lived in an English-speaking environment on LX users' understanding of the meaning, perception of offensiveness and reported frequencies of use of the 30 words?
5. What is the effect of context of acquisition on LX users' understanding of the meaning, perception of offensiveness and reported frequencies of use of the 30 words?
6. What is the relationship between self-reported level of oral proficiency in English and LX users' understanding of the meaning, perception of offensiveness and reported frequencies of use of the 30 words?

5. Results

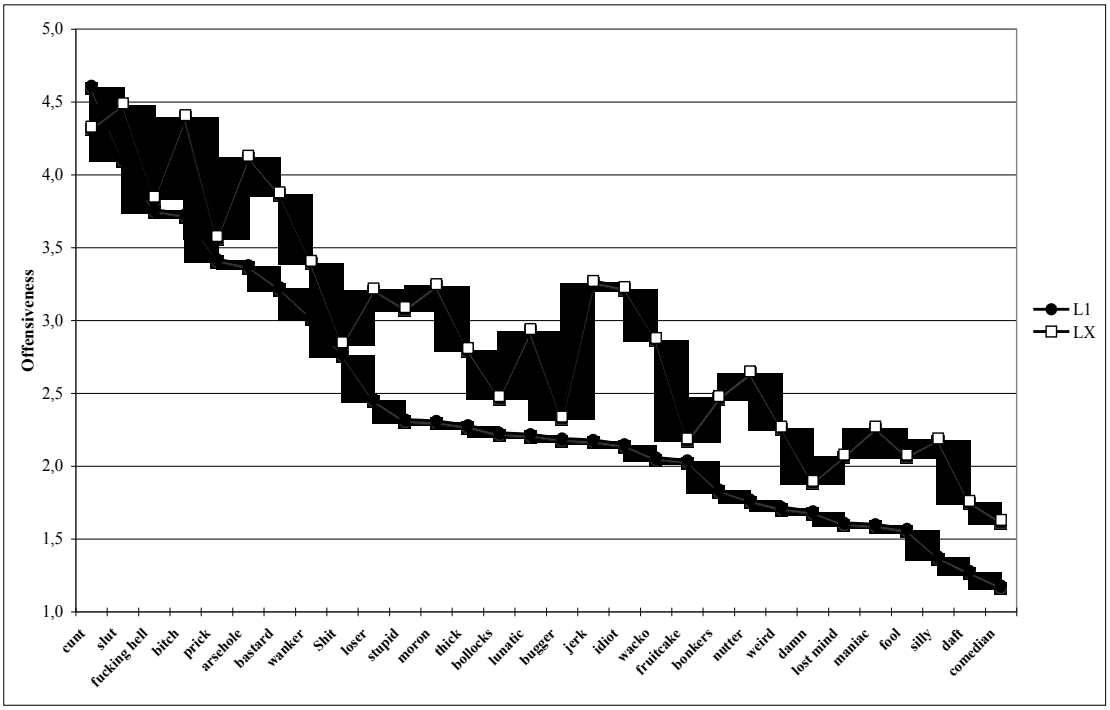
A series of Mann-Whitney U tests for independent samples showed that the 1165 English LX users reported a significantly lower level of understanding of 22 out of the 30 words than the 1159 English L1 users. In other words, LX users were significantly less sure about the exact meaning of a majority of the words. The words which were equally well understood by L1 and LX users were "damn", "fucking hell", "lost your mind", "fool", "maniac", "stupid", "shit", and "arsehole" (see table 1 for the mean rankings). The mean values are presented in figure 1.

Figure 1: Mean values for the understanding of the meaning of the 30 words for the L1 and LX users



A similar pattern emerged for perceived offensiveness with LX users judging 29 out of the 30 words to be significantly more offensive than L1 users. The only word for which LX users under-estimated the offensiveness was the most offensive word in the list: "cunt" (see table 2 for the mean rankings). The words' mean values are presented in figure 2.

Figure 2: Mean values for the perceived offensiveness of the 30 words for the L1 and LX users



The differences in self-reported frequency of use between both groups are also striking.
LX users reported using 25 out of the 30 words with significantly different frequencies than L1 users (see table 2).

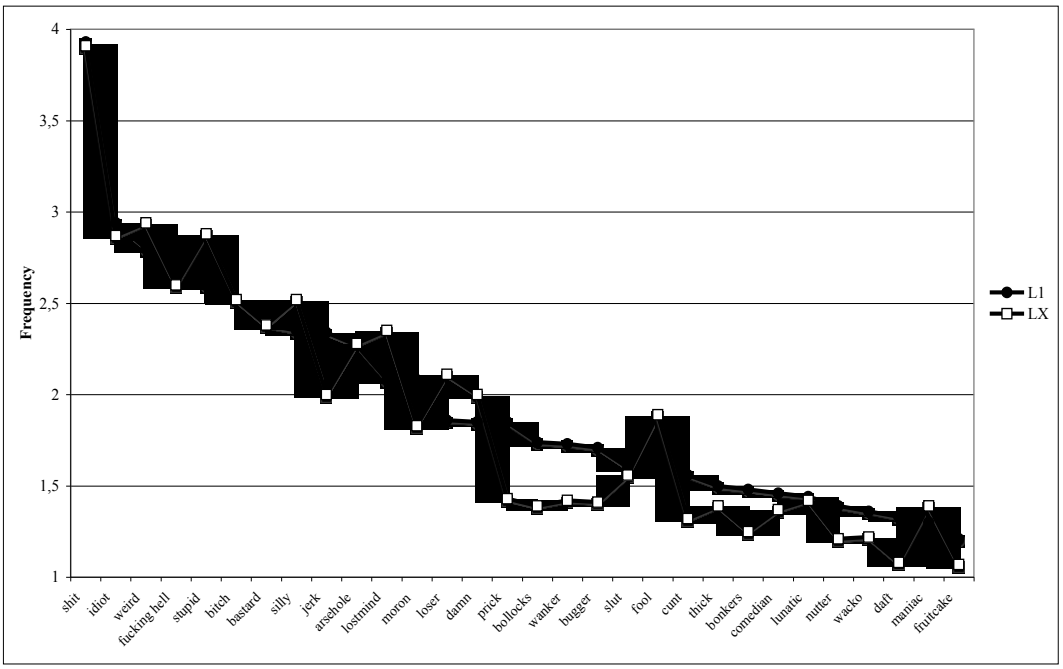
Table 2: Differences in mean ranks between L1 and LX users for Meaning, Offensiveness and Frequency (Mann-Whitney tests)

	Meaning			Offensiveness			Frequency		
	L1	LX	Z	L1	LX	Z	L1	LX	Z
daft	1417	909	-20***	997	1326	-13***	1230	1095	-8***
bollocks	1245	1080	-7***	1086	1238	-6***	1242	1083	-7***
bugger	1280	1045	-9***	1119	1205	-3**	1240	1084	-7***
damn	1158	1166	-0	1095	1229	-5***	1117	1207	-3**
fucking hell	1170	1154	-1	1125	1199	-3**	1183	1141	-1
lost mind	1172	1152	-2	1025	1298	-11***	1091	1232	-5***
fool	1175	1149	-2	1001	1322	-12***	1073	1250	-7***
maniac	1179	1145	-2	950	1373	-16***	1129	1195	-3**
stupid	1168	1156	-1	955	1368	-15***	1093	1231	-5***
wacko	1360	965	-18***	941	1382	-16***	1207	1117	-4***
silly	1181	1143	-3**	912	1410	-19***	1123	1201	-3**
weird	1178	1147	-3**	988	1335	-13***	1127	1197	-3*
comedian	1224	1100	-7***	992	1331	-15***	1188	1136	-2*
wanker	1261	1064	-8***	1040	1283	-9***	1243	1081	-7***
thick	1324	1001	-14***	1013	1311	-11***	1211	1114	-4***
bonkers	1432	894	-22***	978	1345	-13***	1238	1086	-7***
bitch	1179	1145	-3**	939	1384	-17***	1203	1121	-3**
lunatic	1220	1104	-7***	968	1355	-14***	1168	1156	-0
slut	1211	1114	-7***	1013	1310	-12***	1189	1136	-2*
shit	1167	1157	-1	1157	1167	-0	1158	1166	-0
arsehole	1165	1159	-0	932	1390	-17***	1135	1140	-0
cunt	1281	1044	-13***	1213	1111	-5***	1226	1098	-6***
fruitcake	1444	881	-23***	1108	1215	-4***	1208	1116	-6***
jerk	1233	1092	-9***	870	1452	-21***	1239	1085	-6***
moron	1267	1057	-13***	914	1409	-18***	1231	1093	-5***
nutter	1309	1016	-12***	913	1410	-18***	1220	1105	-6***
idiot	1171	1153	-2*	881	1441	-21***	1177	1147	-1
bastard	1187	1138	-4***	968	1354	-14***	1214	1111	-4***
prick	1319	1006	-16***	1095	1229	-5***	1281	1044	-10***
loser	1182	1142	-3**	971	1352	-14***	1106	1217	-4***

* p .05, ** p< .01, *** p < .0001

The mean ranks of the L1 and LX users are non-significantly different for the words “shit”, “arsehole”, “lunatic”, “idiot”, and “fucking hell”. L1 users reported significantly higher use of “daft”, “bollocks”, “bugger”, “wacko”, “comedian”, “wanker”, “thick”, “bonkers”, “bitch”, “slut”, “cunt”, “fruitcake”, “jerk”, “moron”, “nutter”, “bastard” and “prick”. LX users reported significantly higher use of “damn”, “lost your mind”, “fool”, “stupid”, “silly”, “weird” and “loser” (see table 2 for the mean rankings). The mean values are presented in figure 3.

Figure 3: Mean values for self-reported frequency of use of the 30 words for the L1 and LX users



A second series of Mann-Whitney U tests for independent samples was ran on the subset of data from the 1165 LX users. The 673 LX users who had lived in an English-speaking environment reported a significantly better understanding of 19 out of the 30 words (see table 3) than the 489 LX users who had never lived in an English-speaking environment. A significant difference emerged in the perceived offensiveness of 6 words: those who had lived in an English-speaking environment judged “fool”, and “silly” to be less offensive, and “loser”, “cunt”, “thick” and “wanker” as more offensive (see table 3). Close to half of the words were used at significantly different frequencies by those who had - and those who had not - lived in an English-speaking environment. Those who lived in an English-speaking environment reported a higher use of “daft”, “bollocks”, “bugger”, “weird”, “wanker”, “nutter”, “bonkers”, “thick”, “bastard”, “prick” and a less frequent use of “slut”, “cunt”, “damn” and “loser” (see table 3).

Table 3 Differences in mean ranks between LX users who lived in an English-speaking environment and those who did not, for Meaning, Offensiveness and Frequency (Mann-Whitney test)

	Meaning			Offensiveness			Frequency		
	No	Yes	Z	No	Yes	Z	No	Yes	Z
daft	518	628	-6***	592	574	-1	564	595	-3**
bollocks	525	623	-5***	576	586	-1	549	605	-4***
bugger	503	638	-7***	579	583	-0	547	607	-4***
damn	574	587	-1	595	571	-1	607	563	-2*
fucking hell	579	584	-1	572	588	-1	567	592	-1
lost mind	578	584	-1	590	575	-1	588	577	-1
fool	574	587	-1	604	565	-2*	589	576	-1
maniac	559	598	-3**	576	586	-1	582	581	-0
stupid	582	581	-0	577	585	-0	594	573	-1
wacko	543	609	-4***	595	572	-1	586	578	-1
silly	569	591	-2*	619	554	-3**	566	593	-1
weird	569	590	-2*	596	571	-1	547	607	-3**
comedian	557	599	-3**	593	573	-1	576	586	-1
wanker	522	625	-6***	542	610	-3**	559	598	-2*
thick	505	637	-7***	543	610	-3**	538	613	-5***
bonkers	501	640	-7***	591	575	-1	551	604	-4***
bitch	573	587	-2	592	574	-1	600	568	-2
lunatic	551	604	-4***	587	578	-0	564	594	-2
slut	565	593	-3*	581	582	-0	611	560	-3**
shit	577	585	-1	571	589	-1	590	576	-1
arsehole	561	596	-3**	568	591	-1	547	574	-1
cunt	541	611	-4***	533	617	-5***	602	566	-2*
fruitcake	548	606	-3**	592	574	-1	577	585	-1
jerk	564	594	-2*	572	588	-1	581	582	-0
moron	555	601	-3**	576	586	-01	587	577	-1
nutter	489	649	-9***	584	580	-0	560	597	-3**
idiot	575	586	-1	585	579	-0	582	581	-0
bastard	573	587	-1	569	590	-1	557	599	-2*
prick	531	618	-5***	541	611	-4***	561	596	-2*
loser	576	586	-1	586	578	-0	615	557	-3**

* p .05, ** p< .01, *** p < .0001

A series of Kruskal Wallis tests was ran on the same subset of data from the LX users to establish the effect of context of acquisition. A significant difference emerged in the understanding of meaning for 18 words (see table 4). The 503 participants who had acquired English only through formal instruction reported lower levels of understanding than the 552 participants who had acquired the language through a combination of formal instruction and authentic use outside the school, and the 102 participants who had learned English completely outside school. Context of acquisition had a limited effect on offensiveness (only "shit" and "bastard") but had a significant effect on the understanding of 17 words and on self-reported frequency of use of 16 words (see table 4). LX users who had learned English through formal instruction only were less likely to use these 16 words than the mixed and naturalistic learners.

Three sets of Spearman rank correlation analyses between self-reported level of oral proficiency in English and values for the dependent variables (meaning, offensiveness and self-reported frequency of use of the 30 words) were carried out on the data of the 1165 LX users (see table 5). The first set of analyses showed that the relationships between oral proficiency and meaning of the words is positive and highly significant for all 30 words. It his seems that the more proficient LX users felt in English, the better the felt they understood the meaning of the 30 words.

Table 4 The effect of context of acquisition of English on in mean ranks for Meaning, Offensiveness and Frequency (Kruskall Wallis test)

	Meaning				Offensiveness				Frequency			
Word	Formal	Mixed	Natural	Chi^2	Formal	Mixed	Natural	Chi^2	Formal	Mixed	Natural	Chi^2
daft	539	602	651	16*	592	578	524	4	574	585	572	1
bollocks	548	595	645	11**	598	571	531	4	565	589	598	3
bugger	556	587	645	7*	591	581	512	5	583	568	622	4
damn	572	586	572	2	576	587	550	1	559	603	551	6
fucking hell	574	585	569	2	603	567	530	6*	525	629	577	27***
lost mind	571	584	591	3	586	577	552	1	558	609	520	10**
fool	561	589	615	9**	581	584	546	1	579	591	516	5
maniac	567	589	585	2	600	562	567	4	575	589	546	2
stupid	574	581	595	3	594	572	539	3	558	608	523	9**
wacko	535	602	673	23***	590	572	565	1	557	595	601	8*
silly	574	579	603	3	603	565	537	6	563	604	525	7*
weird	572	583	595	3	591	573	553	2	554	608	544	8*
comedian	559	594	599	7*	600	564	557	4	569	596	539	5
wanker	549	597	629	9**	573	580	604	1	543	604	622	17***
thick	532	613	629	21***	574	583	586	0	564	592	583	3
bonkers	521	609	703	38***	572	588	566	1	565	585	616	5
bitch	568	586	596	6*	587	580	533	3	522	627	599	28***
lunatic	567	584	610	4	603	564	540	5	570	595	541	4
slut	559	591	612	10**	583	582	543	2	535	612	618	22***
shit	572	583	590	4	594	580	500	7*	542	610	592	13**
arsehole	564	587	608	7*	595	570	549	3	527	584	594	10**
cunt	544	602	627	16***	560	594	592	5	540	607	621	22***
fruitcake	541	605	626	13**	578	586	547	1	570	589	571	3
jerk	558	595	601	8*	599	565	558	3	559	601	557	5
moron	553	591	642	13**	599	567	549	3	555	600	586	6
nutter	548	598	632	10**	586	586	508	5	572	590	556	3
idiot	571	584	591	4	600	562	567	4	550	613	538	11**
bastard	576	582	579	1	606	568	509	9***	541	612	590	13**
prick	544	597	654	17***	587	569	595	1	549	598	622	11**
loser	564	588	605	9*	586	581	531	3	543	611	585	12**

* p .05, ** p< .01, *** p < .0001

Both negative and positive relationships emerged between oral proficiency and perceived offensiveness. Also, the relationship was highly significant for only 6 words, significant for another 10 words and it was non-significant for the remaining 14 words. A higher level of oral proficiency was linked to a higher offensiveness rating for the more offensive words “cunt”, “prick”, “slut”, “wanker”, and “thick”. However it was linked to lower offensiveness rating for the less offensive words “daft”, “damn”, “lost your mind”, “fool”, “maniac”, “silly”, “weird”, “comedian”, “bitch” and “loser” (see table 4).

A similar pattern emerged for the relationships between oral proficiency and self-reported frequency of use the 30 words. No significant relationship existed for 16 words. A highly significant relationship was found for 5 words and a significant one for 9 words. A higher level of oral proficiency was linked to a significantly higher reported frequency of use of “daft”, “bollocks”, “bugger”, “thick”, “bonkers”, “jerk”, “moron”, “nutter”, “bastard” and “prick”, and a lower frequency of use of “loser” and “slut” (see table 5).

Table 5: Spearman Rank correlation analyses between self-perceived level of oral proficiency and the dependent variables in the LX sample (Rho) (N = 1121)

Word	Meaning	Offensiveness	Frequency
daft	.331***	-.060*	.104***
bollocks	.313***	0.037	.112***
bugger	.377***	0	.142***
damn	.171***	-.077**	0.021
fucking hell	.173***	0.03	0.025
lost mind	.163***	-.081**	0.032
fool	.199***	-.176***	0.009
maniac	.179***	-.089**	-0.004
stupid	.127***	-0.045	-0.032
wacko	.343***	-0.04	0.044
silly	.209***	-.157***	0.01
weird	.194***	-.105***	0.058
comedian	.148***	-.157***	-0.037
wanker	.286***	.129***	.064
thick	.308***	.071*	.118***
bonkers	.364***	-0.027	.156***
bitch	.165***	-.070*	0
lunatic	.286***	-0.042	-0.009
slut	.238***	.073*	-.070*
shit	.142***	-0.004	0.002
arsehole	.247***	0.016	0.034
cunt	.330***	.212***	-0.001
fruitcake	.273***	0.017	0.034
jerk	.284***	-0.005	.104**
moron	.316***	0.026	.070
nutter	.371***	-0.025	.073*
idiot	.156***	-0.042	0.03
bastard	.163***	-0.023	.059*
prick	.324***	.175***	.085**
loser	.160***	-.072*	-.093**

* p < .05, ** p< .01, *** p < .0001

6. Discussion

LX users of English were found to differ significantly in their understanding of the meaning, perception of offensiveness and self-reported frequencies of use of most emotion-laden words from L1 users of English. One possible explanation for this difference is that L1 users had typically had a life-long exposure to these L1 words across a wide variety of situations with various interlocutors allowing them to calibrate their illocutionary effects accuraretly. Moreover, they most certainly experimented with them as part of their language socialisation process making them sure-footed with these words. In contrast, LX users would typically have started hearing and using these words at a later age, and if they studied the LX at school, they would have had less exposure to a smaller range of words and would have had less chance to use these

words in authentic communication. It was therefor not surprising that LX users were less sure about the meaning of these words, and tended to avoid using the most offensive ones. What was surprising was the over-estimation of offensiveness of most words, with the exception of the most offensive one. Considering earlier research on language preferences for swearing and on the lower perceived emotional force of swearwords in an LX (Dewaele, 2004a, b, 2010, 2013), the opposite result could have been expected. The finding that LX users under-estimated the offensiveness of "cunt" is intriguing. It cannot be attributed to low frequency in the input, because there were 11 words with lower frequencies in the BNC, though its reported use was low in the present corpus (mean score of 1.56, *SD* =1.1 on the 5-point scale).

These results show that words with negative emotional valence remain partially clouded in fog for LX users. A number of possible reasons can be imagined. These words may not have been explained as openly as non-emotional words during English FL classes. Indeed, non-emotional words are "safe" for teachers whereas emotional words, especially vernacular, offensive words and insults are "dangerous", and typically avoided in the curriculum (Dewaele, 2005, 2008). Teachers who did mention them may have attached a metaphorical "red flag" to them, reminding users of the potentially explosive content. It is possible that LX users hence create a single broad category of red flag words in their mental lexicon, assuming that they must be bad until proven different. They might not necessarily "feel" how bad they are, or react physiologically (cf. Caldwell-Harris's work) when being exposed to them, only assume that they are red flag words. As a consequence, LX users need to find out for themselves what exactly these negative emotion-laden words mean, how L1 and LX users react to them, and how often they can be used in diverse types of social interactions. LX users were unaware that "cunt" was not just any red flag word but in fact a word that even L1 users considered "double-red".

Opportunities to find out more about these emotion-laden words may be rare for some LX users. Moreover, television in the UK tends to beep out offensive words and the written press only reports the first letter followed by stars. In other words, it can be rather difficult to pick them up. At some point, LX users may be tempted to use these words to boost their linguistic and social credibility (cf. Vingerhoets et al., 2013), at their own peril.

It turns out that the differences between L1 and LX users was not just limited to the taboo words but extended to mildly negative words such as "idiot" or "daft". It is possible that LX users realize that some of their emotion-laden words may have incomplete semantic and conceptual representations (Pavlenko, 2008). If they are aware that a word has a positive emotional valence, it may have a metaphorical "green flag". They know that the word is unlikely to cause embarrassment to themselves and their interlocutors, which encourages pragmatic experimentation. A positive emotion-laden word does not need the degree of pragmatic calibration that a negative emotion-laden word needs. Describing something or somebody in too positive terms is unlikely to have negative social consequences. Negative emotion-laden words have "red flags" because without exact understanding, or without the knowledge of which hedges to use, the knowledge of appropriateness in the situation (Dewaele, 2008; Jay and Janschewitz 2008), they may cause offense and loss of face to both user and interlocutor (Fraser, 2010). Pragmatic experimentation with negative emotion-laden words is fraught with danger. It is not surprising therefore that LX users reported more frequent use of relatively milder words whereas the L1 users reported more frequent use of the taboo words, probably because they felt more sure-footed in their use and in their mastery of illocutionary effects.

Unsurprisingly, the amount of contact with English had an important effect on the LX users' understanding of the meaning and self-reported frequencies of use of a large number of words, and a more limited effect on perception of offensiveness, reflecting Jay and Janschewitz's (2008) finding that English experience of the LX students was unrelated to their offensiveness ratings.

Having lived in an English-speaking environment boosted the understanding of the emotion-laden words, and nudged LX users to more frequent use of some relative taboo words, and avoidance of the most taboo ones ("cunt"[3] and "slut"). Similar findings have been reported on the acquisition of stigmatized sociolinguistic variants (Dewaele, 2013).

Interestingly, the context of acquisition of English, which had typically started 20 years before filling out the questionnaire, had a lasting effect on the understanding of meaning and the frequency of use of more than half of the words. This reflects findings on language preferences for swearing in LXs: those who had learned an LX exclusively through formal instruction were less likely to use that LX to express emotion, including swearing, on average 20 years after leaving school (Dewaele, 2010, 2011, 2013).

The final research question focused on the relationship between self-reported oral proficiency and meaning, offensiveness and frequency of use of the words. LX users who felt more proficient understood all the words but it did not mean they used all of them more frequently, nor that they rated their offensiveness

higher overall. This suggests that their conceptual representations of these words had become more complete, and that they had been able to establish more accurate estimations of offensiveness and appropriate use of these words. Rather than the blanket judgment of LX users that 29 out of the 30 words were more offensive, compared to L1 users, it can be assumed that the most proficient LX users had learned to make more specific, accurate distinctions and subtle judgments. The fact that they did not use all words more frequently also reflects this increased pragmatic competence. They may have understood that what is considered an appropriate use of an emotion-laden word by L1 users does not necessarily mean LX users can create the same illocutionary effects (Dewaele, 2010, 2013).

In other words, while a higher value on the response to the first question "how well do you understand..?" reflects an unambiguous (subjective) judgment of the completeness and accuracy of the semantic representation, the second and third question elicited a different type of response on the more elusive conceptual representation, where a higher value did not necessarily reflect a more accurate or complete representation.

Finally, further research could focus on variation in frequency of use of the 30 emotion-laden words by L1 and LX users interacting with specific categories of interlocutors (same or different age, sex, social status, L1…) in situations of varying formality (cf. Beers Fägersten, 2012; Jay and Janschewitz, 2008).

7. Conclusion

The study of the understanding, perception and self-reported use of mildly negative to highly offensive emotion-laden words in the English of L1 and LX users led to some surprising findings. Although we have come some way since Jay (2000) lamented the avoidance by polite scholars of the area of emotion and swearing, the field has grown (Caldwell-Harris, 2015; Culpeper, 2011; Dewaele, 2013; Pavlenko, 2005, 2008), including Jay's own neuro-psycho-social theory, but much more remains to be uncovered through interdisciplinary perspectives. Sociolinguists (Beers Fägersten, 2012), pragmaticists and psychologists (Jay, 2000, 2005; Vingerhoets et al., 2013) working within a monolingual perspective have uncovered complex relationships between various social, psychological and biological variables. We did not include gender, age, education level, personality traits for reasons of space, although the inclusion of these variables in a multilingual research design makes perfect sense. We choose to focus firstly on English L1 and English LX users and to highlight the differences between them in three measures based on a list of 30 negative emotion-laden words. The LX users were found to over-estimate the offensiveness of most emotion-laden words, possibly as a consequence of the classroom context in which they may have been learnt. Secondly, we focused on variation within the sample of English LX users, considering the effects of having (or not) lived in English-speaking countries, of having acquired English through formal instruction only, or through a combination of formal instruction and authentic use outside school, or through naturalistic acquisition, and, finally, looking at the relationship with self-perceived English proficiency. More contact and exposure to English seems linked to a better understanding of the meaning of the words, and a better calibration of offensiveness and frequency of use. The aim of the study was not to present a detailed analysis of specific emotion-laden words but rather a more panoramic view of the broad effects of the independent variables on a range of negative emotion-laden words, ranging from very mild to very strong. This partial snapshot of the semantic and conceptual representations of our participants reveals a highly complex system, particularly dynamic among LX users, as every exposure to the emotion-laden words has the potential to push the user to consciously or unconsciously re-adjust, re-calibrate the meaning, reconsider the capacity to offend, and, at some future point, decide to mimic (or not) the use by L1 users of these potentially powerful emotion-laden words.

References

Altarriba, Jeanette, Bauer, Lisa M., 2004. The distinctiveness of emotion concepts: A comparison between emotion, abstract, and concrete words. American Journal of Psychology 117, 389–410.

Andersson, Lars G., Trudgill, Peter, 2007. Swearing. In: Leila Monaghan, Jane E. Goodman (Eds.), A cultural approach to interpersonal communication. Oxford, UK: Blackwell, pp. 195-199.

Bailey, Lee Ann, Timm, Lenora A., 1976. More on women's -and men's- expletives. Anthropological Linguistics 18, 438-449.

Beers-Fägersten, Kristy, 2007. Swear word offensiveness. Saarland Working Papers in Linguistics 1, 14-37.

Beers-Fägersten, Kristy, 2012. Who's Swearing Now?: The Social Aspects of Conversational Swearing. Newcastle: Cambridge Scholars Publishing.

Caldwell-Harris, Catherine L., 2015. Emotionality differences between a native and foreign language implications for everyday life. Current Directions in Psychological Science 24, 214-219.

Caldwell-Harris, Catherine L., Tong, Jimmy, Lung, Winvy, Poo, Sinlan, 2011. Physiological reactivity to emotional phrases in Mandarin–English bilinguals. International Journal of Bilingualism 15, 329–352.

Culpeper, Jonathan 2011. Impoliteness. Using language to cause offence. Cambridge, England: Cambridge University Press.

Dewaele, Jean-Marc, Pavlenko, Aneta, 2001-2003. Web questionnaire 'Bilingualism and Emotions'. University of London.

Dewaele, Jean-Marc, 2004a. Blistering barnacles! What language do multilinguals swear in?! Estudios de Sociolinguistica 5, 83-106.

Dewaele, Jean-Marc, 2004b. The emotional force of swearwords and taboo words in the speech of multilinguals. Journal of Multilingual and Multicultural Development 25, 204-223.

Dewaele, Jean-Marc, 2005. Investigating the psychological and the emotional dimensions in instructed language learning: Obstacles and possibilities. The Modern Language Journal 89, 367-380.

Dewaele, Jean-Marc, 2008. Appropriateness in foreign language acquisition and use: Some theoretical, methodological and ethical considerations. International Review of Applied Linguistics 46, 235–255.

Dewaele, Jean-Marc, 2010. 'Christ fucking shit merde!' Language preferences for swearing among maximally proficient multilinguals. Sociolinguistic Studies 4, 595-614.
Dewaele, Jean-Marc, 2011. Variation in self-reported frequency of use of French swearwords among L2 and L3 users of French. In: Martineau, F., Nadasdi, T. (Eds.), Le français en contact: Hommages à Raymond Mougeon. Quebec: Presses de l'Université Laval, pp. 87-116.
Dewaele, Jean-Marc, 2012. L'acquisition et l'usage de scripts dans les différentes langues de multilingues adultes In: Nathalie Auger, Christine Béal, Françoise Demougin (Eds.), Interactions et interculturalité: variété des corpus et des approches. Berlin: Peter Lang, pp. 195-222.
Dewaele, Jean-Marc, 2013. Emotions in Multiple Languages, 2nd ed. Palgrave Macmillan, Basingstoke.
Dewaele, Jean-Marc, 2015. British 'Bollocks' versus American 'Jerk': Do native British English speakers swear more –or differently- compared to American English speakers? Applied Linguistic Review 6, 309–339.
Dewaele, Jean-Marc, 2016. Self-reported frequency of swearing among English L1 and LX users: The effects of interlocutor, personality traits, LX learning history, current use and proficiency. Unpublished ms.
Eilola, Tiina, Havelka, Jelena, 2011. Behavioural and physiological responses to the emotional and taboo Stroop tasks in native and non-native speakers of English. International Journal of Bilingualism 15, 353–369.
Fraser, Bruce, 2010. Pragmatic competence: The case of hedging. In: Kaltenböck, G., Mihatsch, W., Schneider, S. (Eds.), New Approaches to Hedging. Bingley, UK: Emerald, pp. 15- 34
Greasley, Pete, Sherrard, Carol, Waterman, Mitch, 2000. Emotion in language and speech: Methodological issues in naturalistic approaches. Language and Speech 43, 355-375.
Harris, Catherine L., 2004. Bilingual speakers in the lab: Psychophysiological measures of emotional reactivity. Journal of Multilingual and Multicultural Development 25, 223–247.
Harris, Catherine L., Aycicegi, Ayse, Gleason, Jean B., 2003. Taboo words and reprimands elicit greater autonomic reactivity in a first than in a second language. Applied Psycholinguistics 4, 561–578.
Howard, Martin, Mougeon, Raymond, Dewaele, Jean-Marc, 2013. Sociolinguistics and Second Language Acquisition. In: Bayley, R., Cameron, R., Lucas, C. (Eds.), The Oxford Handbook of Sociolinguistics. New York, Oxford University Press, pp. 340-359.
Jay, Timothy B., 2000. *Why we curse: A neuro-psycho-social theory of speech*. Philadelphia and Amsterdam: John Benjamins.
Jay, Timothy B., 2005. American women, their cursing habits and religiosity. In: Jule, A. (Ed.), Women, Religion, and Language. New York, Palgrave-MacMillan, pp. 63-84.
Jay, Timothy B., 2009. The utility and ubiquity of taboo words. Perspectives on Psychological Science 4, 153-161.
Jay, Timothy B., Janschewitz, Kristin, 2008. The pragmatics of swearing. Journal of Politeness Research 4, 267-288.
Kazanas, Stephanie A., Altarriba, Jeanette, 2015. The automatic activation of emotion and emotion-laden words: Evidence from a masked and unmasked priming paradigm. *The American Journal of Psychology* 128, 323-336.
Langlotz, Andreas, Locher, Miriam A., 2012. Ways of communicating emotional stance in online disagreements. Journal of Pragmatics, 44(12), 1591-1606.
Langlotz, Andreas, Locher, Miriam A., 2013. The role of emotions in relational work. Journal of Pragmatics, 58, 87-107.
Langlotz, Andreas, Soltysik Monnet, Agnieszka (Eds.) 2014. Emotion, affect, sentiment: The language and aesthetics of feeling. Tübingen, Germany, Narr.
McEnery, Anthony, Zhonghua Xiao, 2004. Swearing in modern British English: The case of 'fuck' in the BNC. Language and Literature 13, 235-268.
Pavlenko, Aneta 1999. New approaches to concepts in bilingual memory. Bilingualism: Language and Cognition 2, 209-230.
Pavlenko, Aneta, 2002. Bilingualism and emotions. Multilingua 21, 45-78.
Pavlenko, Aneta, 2005. Emotions and Multilingualism. Cambridge, UK, Cambridge University Press.
Pavlenko, Aneta, 2008. Emotion and emotion-laden words in the bilingual lexicon. Bilingualism: Language and Cognition 11, 147-164.

Rayson, Paul, Leech, Geoffrey, Hodges, Mary, 1997. Social differentiation in the use of English vocabulary: some analyses of the conversational component of the British National Corpus. International Journal of Corpus Linguistics 2, 133-152.
Stapleton, Karyn, 2010. Swearing. In: Locher, M. A., Graham, S.L. (Eds.), *Interpersonal pragmatics*. Berlin, Mouton, pp. 289-306.
Vingerhoets, Ad J.J.M., Bylsma, Lauren M., De Vlam, Cornelis, 2013. "Swearing: A biopsychosocial perspective." Psychological Topics 22, 287-304.
Wilson, Rosemary, Dewaele, Jean-Marc, 2010. The use of web questionnaires in second language acquisition and bilingualism research. *Second Language Research* 26, 103-123.

Jean-Marc Dewaele is Professor of Applied Linguistics and Multilingualism at Birkbeck, University of London. He does research on individual differences in psycholinguistic, sociolinguistic, pragmatic, psychological and emotional aspects of Second Language Acquisition and Multilingualism. He has published over 180 papers and chapters. He is the author of *Emotions in Multiple Languages* in 2010 (2nd ed in 2013). He is Vice-President of the *International Association of Multilingualism*, Convenor of the *AILA* Research Network 'Multilingualism', and former president of the *European Second Language Association*. He is General Editor of the *International Journal of Bilingual Education and Bilingualism*. He won the Equality and Diversity Research Award from the *British Association for Counselling and Psychotherapy* in 2013 and the Robert C. Gardner Award for Outstanding Research in Bilingualism in 2016 from the *International Association of Language and Social Psychology*. He is father of a trilingual daughter and holds a black belt (Shodan) in Go Kan Ryu karate.

---

[1] Correspondence to: Birkbeck College, University of London, 26 Russell Square, London WC1B5DT, United Kingdom. Tel.: +442076316399.
E-mail address: j.dewaele@bbk.ac.uk.
[2] We are aware that participants can give different ratings when asked about offensiveness for themselves versus "other people". The formulation used implied that it was the participant's perception that was elicited.
[3] A reviewer pointed out that "cunt" may be a word that is in transition in terms of valence. This is one word that probably has wide variability across participants depending on their age, religiosity, sexual anxiety, conservatism.